

Firm Overview

CRC conducts studies or assists with planning efforts related to natural resource use and management, often with a focus on recreation in river settings. The firm's researchers, Bo Shelby and Doug Whittaker, have been involved in more than a hundred recreation studies or planning efforts for federal, state, local, non-profit, or private organizations across the country. They have also been contracted as expert witnesses in judicial procedures (hearings and trials) and to develop or lead training sessions for several federal agencies (e.g., FERC, Forest Service, National Park Service, Bureau of Land Management, Carhart National Wilderness Training Center) on recreation planning and management.

CRC has particular expertise with visitor impact management and carrying capacity in recreation settings, instream flows for recreation, navigability determinations, and human dimensions of wildlife management. In conducting projects, they have developed and applied "state-of-art" concepts and planning frameworks; developed or improved methodological approaches; and helped apply or integrate findings to help make appropriate management decisions.

Skills or tasks involved in these efforts included developing study plans; organizing field reconnaissance; developing survey instruments and associated databases and coding schemes; statistical analyses of social and hydrological data; concise tabular and graphic presentations of findings; report writing; presentations that integrate findings and photos; meeting facilitation; and leading discussions in contentious decision processes.

Brief Biographies of CRC Researchers

Bo Shelby, PhD. has over 35 years of research experience studying natural resource use and management, and has published hundreds of reports and journal articles. He is nationally recognized as a leading researcher in recreation and instream flows for recreation, and has been involved in over 30 recreation-flow studies that have collected data from over 45 rivers. He is also well known for his work on crowding and carrying capacity issues, co-authoring a 1986 text on the topic. Dr. Shelby is a professor of Forest Resources and Director of the Natural Resources Program at Oregon State University; he has a PhD. in sociology from the University of Colorado. He is based in Corvallis, Oregon.

Doug Whittaker, PhD. has over 25 years of experience working on natural resource issues as an outdoor recreation planner with the Bureau of Land Management and National Park Service or as a researcher/consultant. He has published dozens of reports and journal articles, and has made presentations at symposia and conferences across the country, about half of which have focused on instream flows for recreation. The remainder of his work has focused on crowding, conflict, and carrying capacity issues in recreation settings, or attitudes toward urban wildlife and its management. Dr. Whittaker has a PhD. in human dimensions of natural resources from Colorado State University. He is based in Anchorage, Alaska.

Example projects

Recreation use and impacts studies or planning efforts

- Merced River Wild and Scenic River Plan
- Carrying capacity issues on the Merced River in Yosemite National Park, California
- Allocating river use: A review of approaches and existing systems for river professionals
- Kenai River, Alaska (1992-1993 and 2008-2010)
- Chattooga National Wild and Scenic River, NC/GA/SC
- Delta National Wild and Scenic River, Alaska
- Pit River and Lake Britton Recreation Studies, California
- · Situk River, Alaska
- · Gulkana National Wild and Scenic River, Alaska
- Hells Canyon Complex (Snake River and associated reservoirs), Idaho/Oregon
- Colorado River in Grand Canyon
- Kanektok, Goodnews, and Togiak Rivers, Alaska
- Bear viewing platforms at Brooks River in Katmai National Park, Alaska
- McKenzie River, Oregon
- White Salmon River, Washington
- North Umpqua River, Oregon
- · Deschutes River, Oregon
- · Middle Klamath River, California
- Rakia & Waimakariri Rivers, New Zealand
- Illinois River, Oregon
- Rogue River, Oregon
- Lower Sheenjek Wild and Scenic River Study, Alaska

Non-river studies and projects

- Anchorage Wildlife Plan, Alaska
- Kodiak road-system trails, Alaska
- · Ketchikan Trails Plan, Alaska
- Juneau Trails Plan, Alaska
- Anchorage Wildlife Plan, Anchorage
- · Anchorage Wildlife Study, Alaska
- National Survey on National Park Issues
- · Customer Satisfaction Survey, Colorado State

Forests

<u>Flow-recreation and navigability/water rights</u> studies

- Flows and recreation: A guide to studies for river professionals
- Recreation and wave & hydrokinetic energy technologies: A guide to concepts and approaches
- Sultan River, Washington
- Upper Spokane Falls aesthetic flows, Washington
- McCloud River, California
- Butte Creek and West Branch Feather River, California (DeSabla-Centerville relicensing)
- Recreation flows on Upper McKenzie and Smith Rivers, Oregon (Carmen-Smith relicensing)
- · Kern River, California
- Upper Klamath River, California and Oregon
- John Day River Navigability Adjudication, Oregon
- Clear Creek Whitewater Park, Colorado
- Upper North Fork Feather River, California
- Clackamas River, Oregon
- Pit River, California (Pit 1 and Pit 3-4-5 relicensing)
- Snake River in Hells Canyon, Idaho/Oregon
- Shepaug River Water Rights Adjudication, Connecticut
- Chelan River, Washington
- Idaho Snake River Basin Adjudication (multiple rivers including 5 Wild and Scenic), Idaho
- North Fork of the Virgin River in Zion National Park, Utah
- Cispus River, Washington
- Virgin River, Utah/Arizona/Nevada
- North Umpqua River, Oregon
- · Birch Creek National Wild River, Alaska
- · Delta National Wild and Scenic River, Alaska
- Dolores River, Colorado
- San Pedro River, Arizona
- · Gulkana National Wild and Scenic River, Alaska